AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for correcting topology in a network including a plurality of communication nodes, comprising:

an annular-path determination process in which, when a new transmission path is added, at least one of communication nodes located at both ends of the added transmission path determines as a determining node whether or not a new annular path is formed by the added transmission path; [[and]]

a transmission-path disconnection process in which, when it is determined in the annular-path determination process that a new annular path is formed, at least one of the communication nodes located at both ends of the added transmission path logically or physically makes the added transmission path unavailable in order to prevent formation of the annular path; and

a bus reset process for performing a bus reset when it is determined that no new annular path is formed.

2. (Original) The method according to claim 1, wherein the determining node is one of the communication nodes located at both ends of the added transmission path.

3. (Original) The method according to claim 1, wherein when a new transmission path is added by turning on power of a single communication node, only the powered-on communication node serves as the determining node in the annular-path determination process.

4. (Original) The method according to claim 1, wherein in the annular-path determination process, the determining node transmits a confirmation signal through the added transmission path, and determines whether or not a new annular path is formed by determining

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whether or not the confirmation signal returns from a transmission path of the determining node other than the added transmission path.

5. (Original) The method according to claim 4, wherein the communication nodes have preset, unique waiting times different from each other, and in the annular-path determination process, the determining node transmits the confirmation signal after the corresponding preset waiting time.

6. (Currently Amended) The method according to claim 1, wherein the transmission-path disconnection process includes the step of logically ~~or physically~~ making an attribute of a port forming the added transmission path unavailable by one of the communication nodes located at both ends of the added transmission path.

7. (Currently Amended) A method for correcting topology in a network including a plurality of communication nodes, comprising:

an annular-path determination process in which, when an arbitrary transmission path is eliminated, at least one of communication nodes located at both ends of a logically ~~or physically~~ unavailable transmission path, other than the eliminated transmission path, determines, as a determining node, whether or not an annular path is formed if the logically unavailable transmission path becomes available by making the logically unavailable transmission path available temporarily; and

a transmission-path restoration process in which, when it is determined in the annular-path determination process that no annular path is formed, at least one of the communication nodes located at both ends of the logically unavailable transmission path [[makes]] maintains the logically unavailable transmission path available.

8. (Original) The method according to claim 7, wherein in the annular-path determination process, the determining node transmits a confirmation signal through the unavailable transmission path, and determines whether or not an annular path is formed by determining whether or not the confirmation signal returns from a transmission path of the determining node other than the unavailable transmission path.

9. (Original) The method according to claim 8, wherein the communication nodes have preset, unique waiting times different from each other, and in the annular-path determination process, the determining node transmits the confirmation signal after the corresponding preset waiting time.

10. (Currently Amended) A communication node forming a network, wherein when a new transmission path is added to a port of the communication node, the communication node transmits a confirmation signal through the added transmission path, and determines whether or not a new annular path is formed in the network by determining whether or not the confirmation signal returns from a transmission path of the communication node other than the added transmission path, and

wherein when it is determined that an annular path is formed in the network, the communication node logically makes the added transmission path unavailable, and when it is determined that no annular path is formed in the network, the communication node performs a bus reset.

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11. (Currently Amended) A communication node forming a network, wherein when an arbitrary transmission path in the network is eliminated and a port of the communication node is connected to a logically ~~or physically~~ unavailable transmission path <u>that is not the eliminated transmission path</u>, the communication node transmits a confirmation signal through the <u>logically</u> unavailable transmission path <u>by making the logically unavailable transmission path available temporarily</u>, and determines whether or not an annular path is formed if the <u>logically</u> unavailable transmission path becomes available by determining whether or not the confirmation signal returns from a transmission path of the communication node other than the <u>logically</u> unavailable transmission path<u>, and</u>

<u>wherein when it is determined that no annular path is formed, the communication node keeps the logically unavailable transmission path available</u>.